Anamorphic Shifts:

Copernican Inversions Through Invisible Inversion Circles in Humanistic Sciences

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Ethnotopology, as articulated by Don. Kunze[1], connects Lacan's topological ideas to cultural myths, focusing on how inversive geometries shape human cognition. Ethnotopology demonstrates that cultural and mythic structures are rooted in unconscious operations like parapraxis, orthogonality, and inversion, forming the basis of metaphoric thinking before formal mathematical concepts. This links to the Inversion Circle (I.C.) by highlighting how these ancient spatial structures—like the paradox of pursuing what escapes—resonate with inversive geometries in I.C. Ethnotopology and I.C. both reveal the inversions and circularities that structure human perception and desire. The question is: how cultural topoi encode these unconscious geometries?

The Inversion Circle (I.C.) is a potent metaphor that serves as a tool to explore deep shifts in perception, understanding, and meaning in both the natural and human sciences. As a metaphor for metaphors, it embodies the recursive nature of thought and transformation, capturing how inversions and reorientations in perspective are at the heart of our cognitive processes. This concept acts not only as a metaphor for a mathematical process but as a metaphor for the process of metaphor-making itself—a dynamic that appears across fields and disciplines. In this essay, I will explain how the I.C. operates as a metaphor for profound shifts in understanding, particularly drawing from the Copernican Revolution as an archetype for such an inversion of perspective. We will see how the I.C. manifests itself even when we cannot locate it directly, and why it offers a profound analogy for the *objet petit a*, the unattainable object of desire in psychoanalysis.

Inversion Circle as a Metaphor for a Metaphor

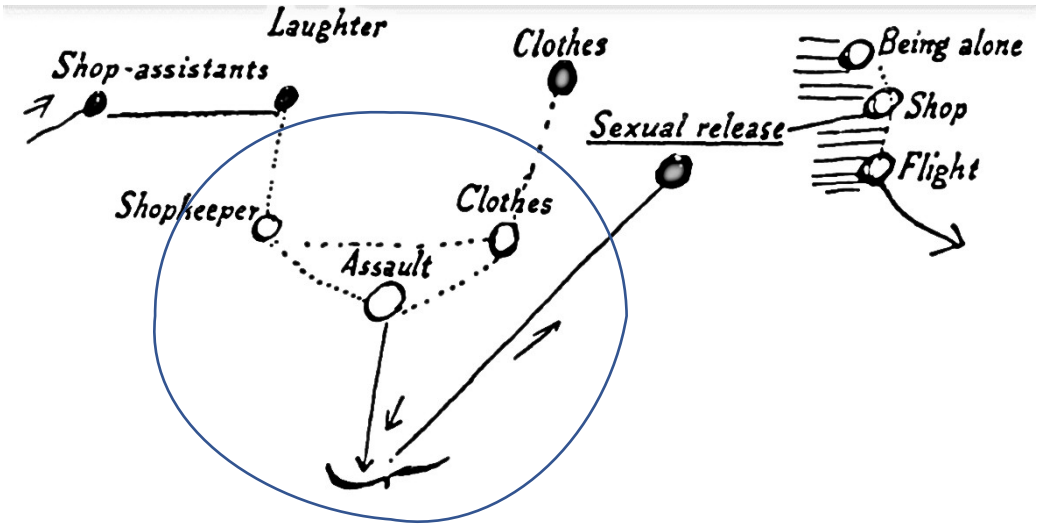
The inversion circle’s primary allure lies in its ability to transform the very structures it interacts with. In mathematics, an inversion circle changes the nature of space, turning straight lines into arcs or circles, and vice versa. This dynamic ability to reverse relationships mirrors the process of metaphor itself. Just as a metaphor bridges two seemingly unrelated concepts, the I.C. connects and reverses structures, offering a new

[1] Kunze, Don. "*Ethnotopology*." New Lacanian Topology, 2024.
[URL: https://bpb-us-e1.wpmucdn.com/sites.psu.edu/dist/9/19778/files/2024/08/ethnotopology.pdf]

framework through which we understand relationships. In humanistic sciences, the inversion circle becomes a metaphor for the very act of shifting—a core mechanism in metaphorical thinking itself.

For example, when Freud spoke of repression, he wasn’t merely discussing a passive act of burying unpleasant memories. Instead, he was illustrating a dynamic process where the content is displaced and reappears elsewhere, transformed, and symbolically inverted. The inversion circle metaphor helps us comprehend this transformation: the original point of repression "curves" and manifests as something else—a symbolic form that is related but distorted. This process echoes how metaphors reconfigure our understanding by transforming familiar concepts into new shapes.

In the second part of *Entwurf's* diagram, Freud's central *sexual sphere* ("*sexuelles Gebiet*") functions as the gravitational nucleus, exerting a *deferred action* across all elements within its orbit. This sphere, though unseen, orchestrates a complex interplay of relationships: laughter to laughter, cloth to cloth, shop to shop, etc. Each element is subtly influenced by this central sphere, aligning them into a coherent rotational pattern akin to hysteric repetition compulsion. The sexual sphere's latent force puts every instance of laughter, every piece of cloth, and every shop into a dynamic, planetary-like motion, continuously shaping their interactions and significance through deferred action. I will return to this at the end of this essay.

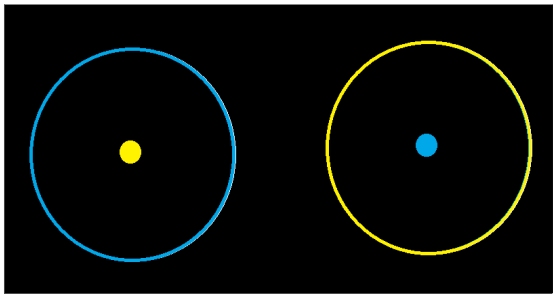


Deferred Action and the Gravitational Sphere: Freud's Central Sexual Sphere Freud's model posits that the central sexual sphere exerts an unseen yet potent force, influencing various elements through the mechanism of deferred action. In this model, laughter, cloth, and shops are not isolated phenomena but are interconnected through their relation to the central sphere. Deferred action implies that the impact of the central sphere on these elements unfolds over time, rather than immediately. This latent influence creates a complex system where each element orbits around and is shaped by the central

sphere's gravitational pull and this is how unconscious forces shape our perceptions and interactions in subtle, often indirect ways.

The Copernican Revolution as an Example of Inversion

The Copernican Revolution stands as a historical embodiment of the inversion circle principle, even though its presence is implicit rather than explicit. Before Copernicus, the geocentric model dominated Western thought, placing the Earth at the center of the cosmos. The shift to heliocentrism did more than relocate celestial bodies—it required an inversion [of perspective]. The Earth, once the fixed point around which everything revolved, became just another planet in orbit. The sun, once a seemingly moving object in the heavens, became the fixed center. What was once perceived as circular motion around the Earth transformed into a heliocentric system where the Earth itself traced a circular path. Although the inversion circle itself remains unseen, its effects manifest through the dynamic transformation between linear and circular paths in the motion of celestial bodies.



Comparison of the Heliocentric and Geocentric Models: Motion and Inversion: This figure contrasts the heliocentric model (left) with the geocentric model (right), showing the motion of the Sun (yellow) and Earth (blue). When considering the time axis, the essence of an invisible inversion circle emerges: what was once a point or line transforms into a circle or helix, while the circle or helix turns back into a point or line.

Whenever we refer to a "Copernican revolution" in contemporary contexts, we are drawing on this idea of inversion—of completely flipping the framework of understanding. The concept of the inversion circle helps articulate this process, where a fundamental shift in perspective turns what was once assumed to be fixed into something dynamic, and vice versa.

The Invisible Inversion Circle and the *objet petit a*

One of the most intriguing aspects of the inversion circle is that, despite its profound impact, we often cannot see it directly. It operates invisibly, like a hidden force, structuring relationships and transforming lines into curves and vice versa without ever appearing in the field of view. This elusive quality makes the inversion circle a perfect analogy for Lacan's *objet petit a*, the unattainable object of desire. The *objet petit a* is not a concrete object but a void: a gap around which desire revolves. It is always just out of reach, yet it shapes behavior and perception in fundamental ways. Similarly, the inversion circle, even when not seen

directly, but its effects are felt in the profound shifts it causes. **It structures the field without being part of the field.**

The inversion circle operates as a dynamic metaphor across fields. In mathematics, it shows how geometric structures can be transformed; in humanistic sciences, it models how our understanding can be inverted through shifts in perspective, whether in moments of revolutionary change like the Copernican Revolution or in the subtle workings of repression and desire.

The invisible inversion circle thus offers a way to conceptualize the profound, often unseen transformations that underlie our most fundamental shifts in knowledge and perception.

The motto, *Ignota Latebat*, "she lay hidden," does likely refer to *Metafisica* herself, but where does this come from? There are many words to use to indicate concealment, but *latere* is rich with overtones of declination, laying low — "lying doggo" as the English expression has it. There is the sense both of concealment and the uncanny, a wily, adroit manner of staying out of sight.

Ignota Latebat: Metaphysica's Deliberate Concealment: The motto "Ignota Latebat" (“she lay hidden”) on the title page engraving of *The New Science* signifies a deliberate, strategic concealment rather than simple invisibility. This phrase, with its connotations of declination and subtle evasion, reflects a complex interplay of visibility and obscurity. It parallels the psychoanalytic mirror stage, where absence and reflection create psychical tension and self-perception. Metaphysica, in this context, remains hidden behind a play of reflections and inversions. This image is sourced from Don Kunze’s book *Thought and Place*.

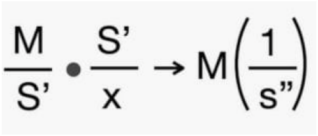
Back to Emma

"*If you see a toilet in a dream, do not use it,*" the joke points to a common experience where dream imagery, such as water or toilets, is often an indirect representation of the body's physical needs. This kind of dream symbol exemplifies the displacement Freud described in his work. Dreams, much like the inversion circle, unfold through mechanisms of displacement and condensation, flipping relations between the manifest and latent content of the dream. This conceptual mirroring is particularly evident when considering Freud’s notion of the *dream's navel* ("*Nabel des Traums*"). In *The Interpretation of Dreams*, Freud describes the dream’s navel as the obscure, tangled point in the dream that remains impervious to analysis—an invisible knot connecting the dream to the unknown depths of the unconscious. Despite its hidden nature, this navel exerts a profound influence over the entire dream, shaping its meaning

from the shadows, much like an invisible inversion circle transforms points into circles and circles into points.

The object that appears in the dream (such as the toilet or water) is not a straightforward representation but a displaced one. It sometimes refers to the bodily condition, such as the urge to urinate, rather than its apparent symbolic meaning. At any case, what seems obvious on the surface (the dream object) is actually a displaced form of something hidden (a bodily sensation or unconscious desire). The transformation of bodily urges into dream symbols through displacement reflects the hidden inversion at work between reality and the dream world.

In his "Entwurf" (Project for a Scientific Psychology) and later in *The Interpretation of Dreams*, Freud describes how latent thoughts (which may include repressed desires, fears, or bodily sensations) are transformed into the manifest content of the dream. This transformation involves a process where significant elements are displaced onto seemingly insignificant objects or actions. In Emma's example, anxiety about her body was displaced onto her clothing, a subtle but profound shift that conceals the underlying meaning behind a more palatable symbol. The actual anxiety or bodily feeling is 'inverted' and represented in a different form, much like the inversion of perspective in a geometric inversion circle.



10. Freud: Emma's Fear of Dress Shops

The concept of orthography (the right-angled graphic relation of independence of the x-y axes) is critical in describing the unconscious Real's relation to the conscious-Symbolic. This is reflected in the vertical operations of Lacan's metaphor formula (the suppression of a signifier, S' by M, the complementary "expression" of a signifying chain, S' by x), in comparison to the horizontal movement of the formula from left to right: first a sudden synchronic replacement that obscures some signifier, S', and has us thinking in an alternative medium. This is presented to the right of the multiplication sign, the

Inversion Circle and Emma's Fear of Dress Shops (Don Kunze) Don Kunze interprets Freud's account of Emma's trauma through the lens of the inversion circle. Emma's molestation by a shopkeeper is suppressed, only to resurface years later in a dress shop where she misinterprets laughter as mockery. Kunze argues that the two shops, though separate, become identical in Emma's unconscious, collapsing into a single traumatic experience. inversion circles (psu.edu)[2]

Inversion and Dream-Work as Psychological Anamorphosis

Dreams can be seen as a kind of psychological *anamorphosis*, where the "*image*" of reality is distorted and displaced, only to reveal its true meaning when viewed from the correcting angle (in the context of psychoanalytic interpretation). The inversion circle parallels the dream-work's function of disguising latent content under the veil of manifest symbols. Thus, the dream operates on a similar principle: what appears to be a straightforward symbol (like a toilet) may be nothing more than a

[2] Check also my article on this very subject: Simonides.pdf (bpb-us-e1.wpmucdn.com) 1.1/ Anamorphic Shifts/ Ghoochani

displaced bodily sensation, yet it could also contain layers of symbolic meaning tied to deeper unconscious material.

Dreams, therefore, are not merely a reflection of reality but exist in an inversive relationship with it. This hidden inversive structure allows dreams to operate on multiple levels—simultaneously addressing the immediate conditions of the body (like needing to urinate) and the deeper layers of psychic life, where unconscious desires and repressed thoughts manifest in disguised forms. In essence, dreams and reality engage in an ongoing process of inversion, where symbols and sensations shift places. Freud's analysis of displacement reflects this deeper structure, where the dream inverts the relations between latent and manifest content, reality and symbol, object and meaning. The inversion circle provides a rich metaphor for understanding the dream-work. It touches on a deep and complex aspect of Freud's work regarding repression, displacement, and their connection to the "*sexual sphere*," specifically as explained in his early writings, such as in the *Entwurf* (Project for a Scientific Psychology).[3]

Inversion and Curvature as Metaphors for Repression

There is an interesting metaphorical connection between repression and **curvature**, as well as the **sexual sphere**. In this metaphor: 1. Repression could be seen as increasing the "curvature" in the psychic system. Freud's concept of repression involves a distortion or bending of mental energy, where the original content (which is repressed) is hidden away, but still exerts force within the psyche. To remember, curvature is the inverse of the radius of the inversion circle. The bigger a circle the more flat looks its surface. 2. The **sexual sphere** seems particularly susceptible to this "*curvature*" due to its deep entanglement with both conscious and unconscious life, as Freud repeatedly emphasizes. The displacement in hysteria is therefore not merely a defense but a transformation of psychic energy, which "*curves*" around the original content and reappears as a symptom or a symbolic substitute. The hidden content continues to

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[3] Here is the key part of Freud's text in its original German form in the second part of Entwurf:

Hysterische Verdrängung: "*Die hysterische Verdrängung geschieht offenbar mit Hilfe der Symbolbildung, der Verschiebung auf andere Neurone. Man könnte nun meinen, das Rätsel liege nur im Mechanismus dieser Verschiebung, an der Verdrängung selbst sei nichts zu erklären*."

Sexuality's Role in Repression: "*Es ist ganz unmöglich anzunehmen, daß peinliche sexuelle Affekte an Intensität allen anderen Unlustaffekten so sehr überlegen seien. Es muß ein anderer Charakter der sexuellen Vorstellung sein, welche erklären kann, daß einzig sexuelle Vorstellungen der Verdrängung unterliegen*."

Freud is essentially pointing out that the intense affect related to sexual representations plays a central role in the mechanism of hysterical repression. He suggests that there is something specific about the nature of sexual ideas that makes them uniquely prone to repression, beyond their mere intensity of unpleasantness.

"*curve*" around the repressed material, distorting the psychic landscape much like an inversion circle distorts geometric space.

In Freud's *Entwurf*, repression operates not just by keeping unpleasant content out of consciousness, but by creating an alternative "*curved*" path for that energy to travel—leading to the formation of symbols and other neurotic symptoms. This parallels the idea that in geometric inversion, points and lines are not lost but transformed into different, but related, shapes.

Conclusion: The Sexual Sphere and Repression

Freud’s discussion of the *sexual sphere* in repression highlights that sexuality, for reasons tied to both its psychological and biological nature, is particularly prone to this process of symbolic inversion and displacement. This mirrors the way an inversion circle transforms shapes in geometry—repression in the psychic world transforms raw sexual content into distorted, displaced forms, giving rise to symptoms that are both reflections and concealments of the underlying content. This metaphorical understanding of repression as curvature or inversion highlights the deeper structural dynamics at play in Freud’s early psychoanalytic theory, where psychological forces are continuously bending, curving, redirecting and inverting to maintain psychic balance while simultaneously allowing repressed content to manifest in displaced, symbolic forms.